

Willard's Woods

Lexington Massachusetts



*Land Management Assessment and Planning
Land Stewardship Inc.*

Tonight's Agenda

- Property Overview
 - ❖ Infrastructure, Natural Resources and key features
 - ❖ Resident Wildlife
 - ❖ Stressors and Challenges
- Goals and Recommendations
 - ❖ Short Term Goals
 - ❖ Long Term Goals
 - ❖ Updated Invasive Plant Management
 - ❖ Field Restoration
 - ❖ Universally Accessible Trail Map
- Questions, Comments, and Discussion

A Bird's Eye View

Structural Features

- Trails
- Boardwalks
- Stone walls
- Kiosks
- Bridges
- Bird boxes



Property Overview

Town of Lexington
Willard's Woods
Lexington, MA
December 2019

- ▲ Entry points
- Bird box
- Bridge

- Duck box
- Kiosk
- Sign

- Boardwalk
- - - Stone wall
- - - Trails

- ▨ Parking
- ▨ Picnic



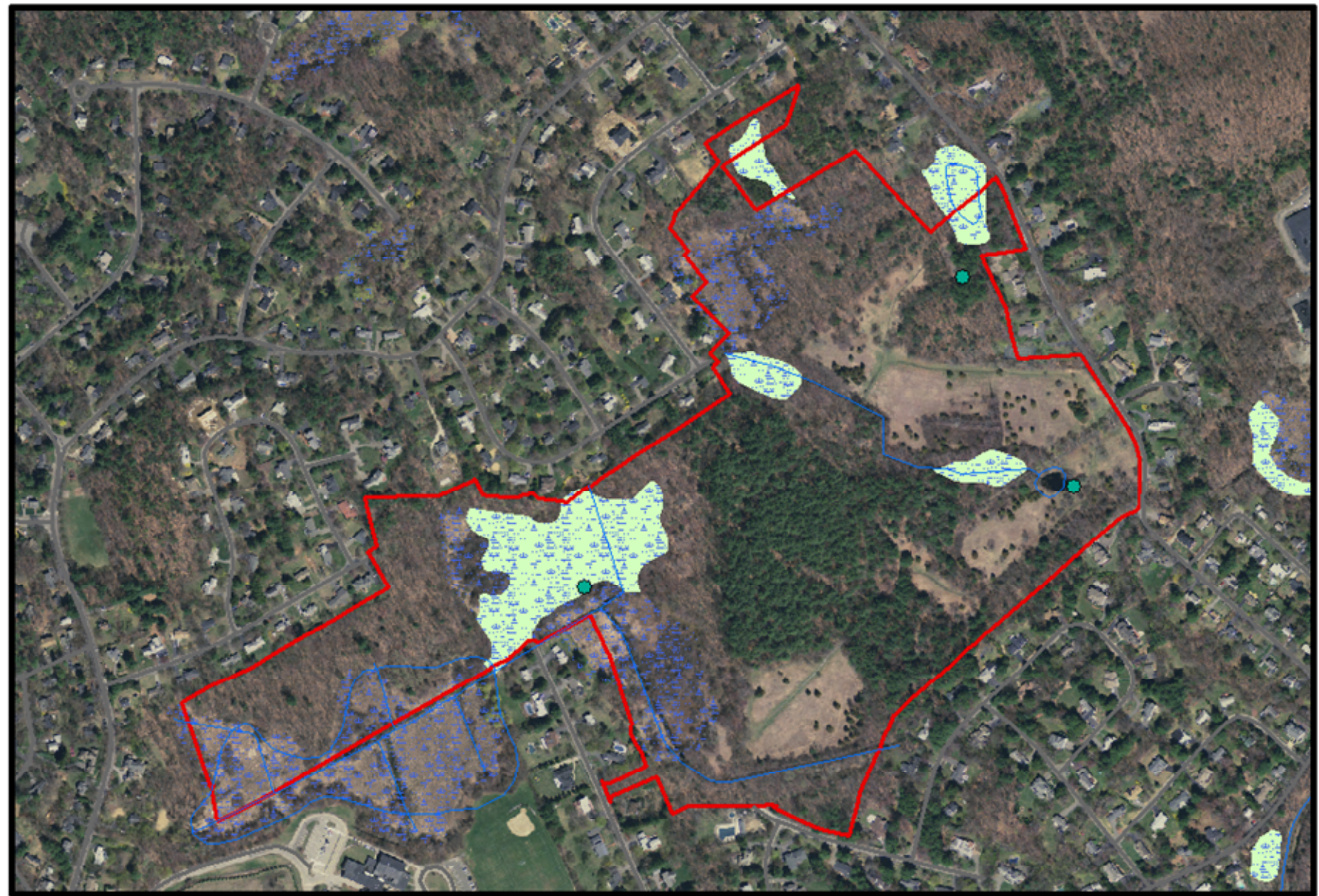
0 0.125 0.25 Miles

Map prepared by Jessica Applin,
Land Stewardship Inc.
December 2019

Natural Resources


Wetland Resources

- *Wooded marshes*
- *Streams*
- *Channels*
- *Potential Vernal Pools*
- *Old Mill Pond*



Wetland Resources

Town of Lexington
Willard's Woods
Lexington, MA
October 2019

- | | |
|--|--|
|  Potential Vernal Pools |  Marsh/Bog |
|  Hydrography |  Wooded marsh |



0 0.125 0.25 Miles

Map prepared by Jessica Applin,
Land Stewardship Inc.
October 2019

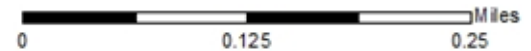
Natural Communities

- *White Pine Oak Forest*
- *Transitional Oak Forest*
- *Shrub Swamps*
- *Wet Meadows*
- *Fields*



Natural Communities

Town of Lexington
Willard's Woods
Lexington, MA
December 2019



Map prepared by Jessica Applin,
Land Stewards hip Inc.
December 2019



Tony Varella 2017

Great horned owl - *Bubo virginianus*



Frank Lukisseck

Opossum – *Didelphis virginiana*

Wildlife

Confirmed residents



Whitetail deer
Odocoileus virginianus



Kim Smith

Eastern coyote - *Canis latrans*



©James Hurt

Raccoon - *Procyon lotor*

**Based on track and sign observation, shared photographs, auditory confirmation, and wildlife camera*

Wildlife

Confirmed residents



Red squirrel
Tamiasciurus hudsonicus



Red Tailed Hawk
Buteo jamaicensis



Eastern cottontail
Sylvilagus floridanus



White footed mouse
Peromyscus leucopus



Grey squirrel
Sciurus carolinensis



Black legged tick
Ixodes scapularis

** Based on track and sign observation, shared photographs, auditory confirmation, and wildlife camera*

Stressors & Challenges

Stressors & Challenges

Things to consider moving forward

- Field Encroachment
- Trail Deterioration
- Dogs, the Public, & Wildlife
- Visitor Management
- Forest Pests (none found)
- Climate Change
- Invasive Plants



Invasive Plants

Key players



Winged euonymus
Euonymus alatus



Multiflora rose
Rosa multiflora



Shrub honeysuckle
Lonicera



Glossy buckthorn
Frangula alnus



Oriental bittersweet
Celastrus orbiculatus

Invasive Plants

Other contenders



Norway maple
Acer platanoides



Autumn Olive
Elaeagnus umbellata



Common buckthorn
Rhamnus cathartica



Japanese knotweed
Fallopia japonica



Garlic mustard
Alliaria petiolata

Invasive Plants

Early Detection Populations



Black swallowwort
Cynanchum louiseae



Purple loosestrife
Lythrum salicaria

Goals and Recommendations

Managing for Resiliency

Promote Biodiversity

- Invasive Plant Management
- Native Plantings
- Pests and Pathogens
- Wildlife Structures
- Pollinator Support
- Monitoring

Encourage System Complexity

- Diversity of Habitats
- Functionality
- Addressing Forest Regeneration
- Carbon Sequestration
- What's missing?
- What does the system want to be?

Address Landscape Stressors

- Invasive Plants
- Dogs & Wildlife
- Human Wildlife Interface
- Erosion
- Deer Overabundance
- Climate Change

Recommendations

Short Term Goals

- Invasive & nuisance plant management - safety (Roadsides/entrance)
- Invasive plant management - priority areas (fields/mill pond/select wetland & stream edges/field edges)
- Mill Pond Area continued restoration
- Wildlife Improvements - bird and bat boxes installation/maintenance/interpretive signs
- Select stone wall vegetation clearing
- Cedar tree management
- Updated mowing schedule for field restoration



Recommendations

Resources:

- Apple orchard replanting
- Field restoration plantings—
Pollinator Meadow
- Field edge reclaiming
- Continued invasive plant management



Long Term Goals

Infrastructure:

- Parking area improvements
North Rd/Upgrade Brent Rd
entrance
- Trail head upgrades
- Handicap accessibility/UA trail
- Picnic area upgrades (fire pit,
picnic tables, etc.)
- Bike path/carriage road
upgrades and repair
- Accessible viewing platforms
& benches

Recommendations

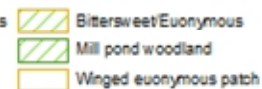
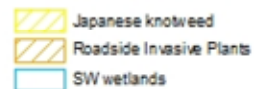
Invasive Plant Management Priority Areas

- Safety Concerns
- Climbing bittersweet
- Potential Vernal Pools
- Wetlands & Buffers
- Early Action Populations
- Fields & Encroachment



Invasive Management Priority Areas

Town of Lexington
Willard's Woods
Lexington, MA
December 2019

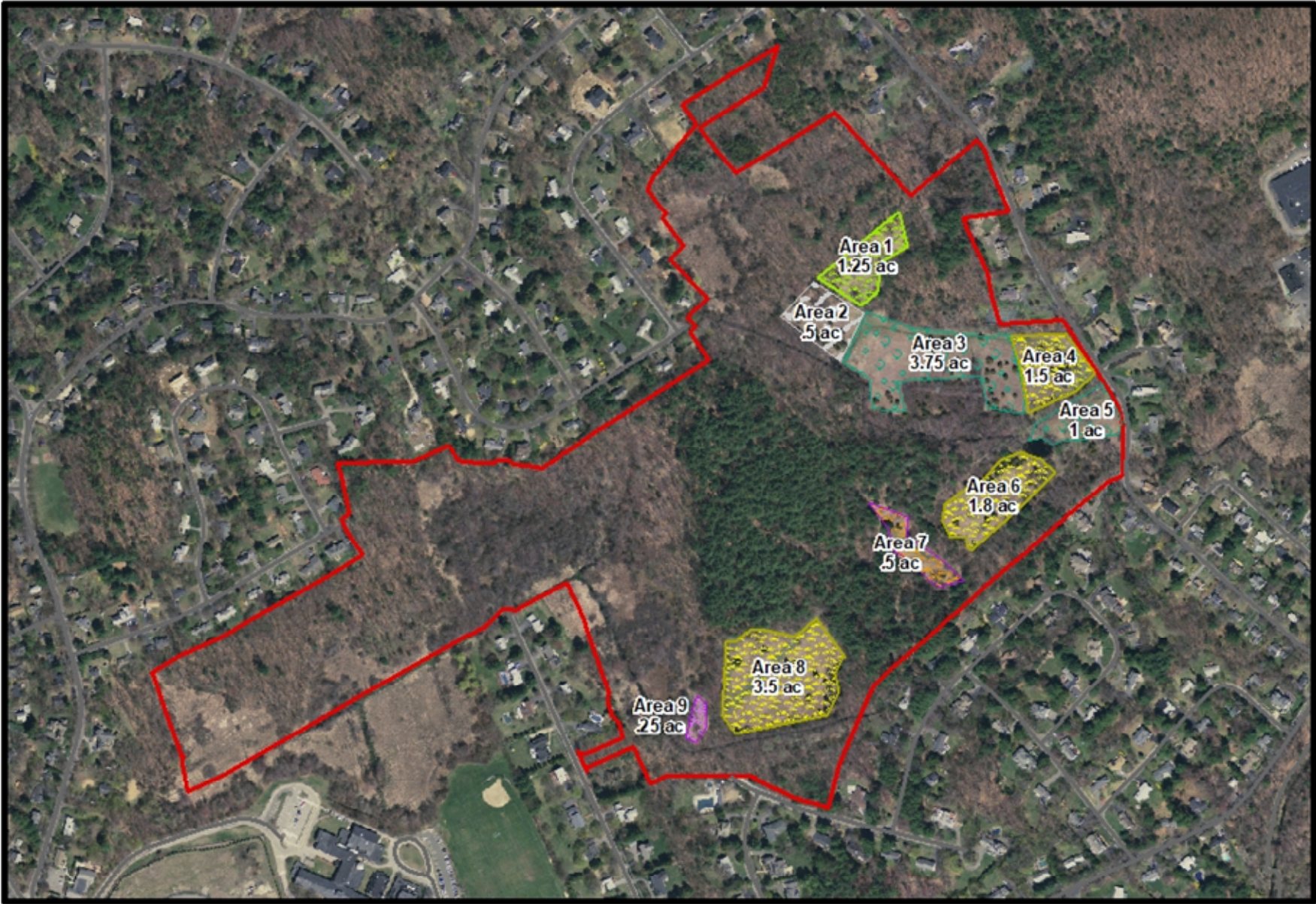


0 0.125 0.25 Miles

Map prepared by Jessica Applin,
Land Stewardship Inc.
December 2019

Recommendations

Field Restoration



Field Restoration

Town of Lexington
Willard's Woods
Lexington, MA
July 2020



Warm Season Grassland

Warm Season Grassland/Apple orchard

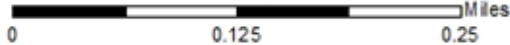
Warm Season Grassland/Sedge Meadow



Pollinator/Sedge Meadow

Native Meadow

Shrubland



Map prepared by Jessica Applin,
Land Stewardship Inc.
July 2020

Recommendations

Field Restoration

Shrubland (0.5-ac.)



Recommendations

Field Restoration

Warm Season Grassland

(7.3-ac.)



Recommendations

Field Restoration

Native Meadow (4.75-ac.)



Recommendations

Field Restoration

Pollinator Meadow(0.25-ac.)



Photo credit: UNH Extension

Grassroots Wildlife Conservation Program

<http://www.grassrootswildlife.org/>

Native Plant Trust

<https://www.nativeplanttrust.org/>



Recommendations

Infrastructure

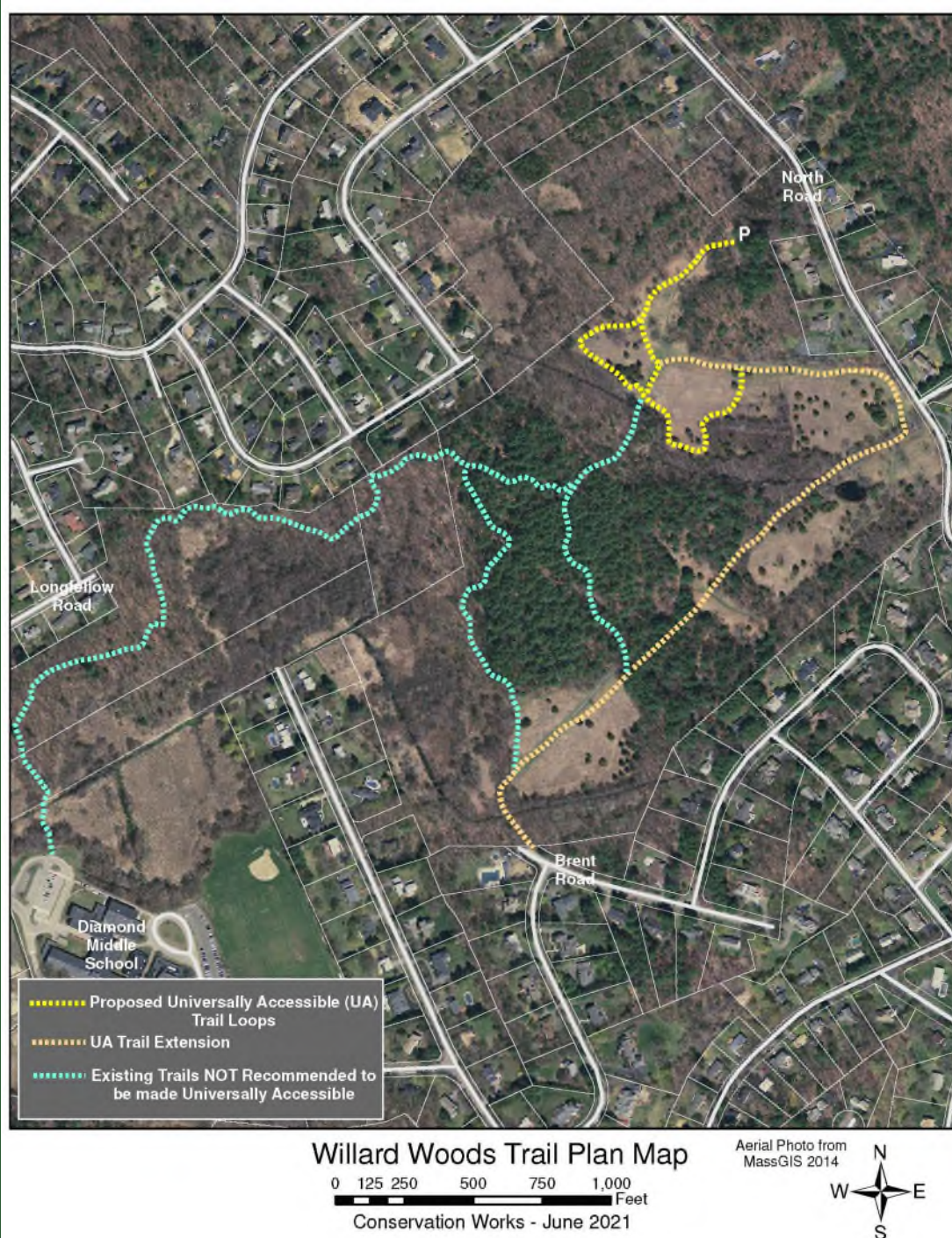
- ▣ Parking area improvements North Rd/Upgrade Brent Rd entrance
- ▣ Trail head upgrades
- ▣ Handicap accessibility/UA trail
- ▣ Picnic area upgrades (fire pit, picnic tables, etc.)
- ▣ Bike path/carriage road upgrades and repair
- ▣ Accessible viewing platforms & benches



Recommendations

Infrastructure

Universally Accessible Trail



Public Feedback from 6/17/2021

Commission on Disabilities

- Supported exploration of a UA trail on site and associated handicapped parking space(s)
- Expressed concerns for bikes to be allowed on any UA trails

Public

- Opposed parking area on Brent Road ***majority of feedback***
- Expressed confusion of timeline for project and details of UA trail
- Expressed confusion of bike path restoration/ UA trail extension
- Some expressed opposition for UA trail in general
- Supported ecological management activities and wildlife habitat improvements
- Supported Apple Orchard
- Supported restoration of Millpond

CPA Funding

- 2019 ATM appropriation of \$138,273

\$114,646 balance remaining

1. meadow preservation (2022)
2. engineered design plan for UA trail and parking areas (2022)

- FY24 (7/1/23) will include an increase of \$800 in our operating budget to reflect ongoing annual operational costs for meadow preservation

Note we currently pay DPW overtime to mow our properties at the end of each year. They are NOT available for any mid-season mowing so a consultant would need to be hired

Next Steps

- No voting tonight!
- LexMedia will post recording ~ 1 week
- Staff will write up the Q&A and link to recording on Conservation Website
- Public Comment Period 11/15- 12/13
- Staff will compile comments and submit to Conservation Commission in preparation for their 12/20 Meeting
- Vote to take place during 12/20 Conservation Commission Meeting

Questions?